

CLAIMS

What is claimed is:

1. A computer-implemented method of generating serialization code for representing a model in a plurality of type systems, the method comprising the steps of:

- i) producing an input file from said model for a given set of objects;
- ii) providing a code generator for acting on said input file to generate said serialization code.

2. The method of claim 1 wherein said model is exported from a UML description.

3. The method of claim 1 wherein said model comprises a plurality of objects.

4. The method of claim 1 wherein said model is exported as an XMI file.

5. The method of claim 1 wherein said plurality of type systems comprises Java and SQL.

6. The method of claim 1 wherein said input file is an XML file.

7. The method of claim 6 wherein said model is exported as an XMI file and said XML input file is produced from said XMI file by an XSL transform.

8. The method of claim 1 wherein said input file comprises binding information between said model and said plurality of type systems.

9. The method of claim 1 wherein said input file comprises graphs that describe relationships between said objects of said model.

10. The method of claim 9 wherein said graphs describe for an object a subset of associations to follow to serialize the object.

11. The method of claim 1 wherein said input file comprises the type conversion information that describes how to convert a non-primitive type to a string.

12. The method of claim 1 wherein two code generators are provided for acting on said input file to generate said serialization code.

13. The method of claim 12 wherein said two code generators are a binding generator and a DO generator.

14. A method according to claim 1, further comprising the step of:

iii) using said serialization code in an application to carry out type conversion.

15. A data processing system for generating serialization code for representing a model in a plurality of type systems, said data processing system comprising:

i) means for producing an input file from said model for a given set of objects; and

ii) means for providing a code generator for acting on said input file to generate said serialization code.

16. A data processing system according to claim 15 wherein said model is exported from a UML description.

17. A data processing system according to claim 15 wherein said model comprises a plurality of objects.

18. A data processing system according to claim 15 wherein said model is exported as an XMI file.

19. A data processing system according to claim 15 wherein said plurality of type systems comprises Java and SQL.

20. A data processing system according to claim 15 wherein said input file is an XML file.

21. A data processing system according to claim 20 wherein said model is exported as an XMI file and said XML input file is produced from said XMI file by an XSL transform.

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22. A data processing system according to claim 15 wherein said input file comprises binding information between said model and said plurality of type systems.

23. A data processing system according to claim 15 wherein said input file comprises graphs that describe relationships between said objects.

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24. A data processing system according to claim 23 wherein said graphs describe for an object a subset of associations to follow to serialize the object.

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25. A data processing system according to claim 15 wherein said input file comprises the type conversion information that describes how to convert a non-primitive type to a string.

26. A data processing system according to claim 15 wherein two code generators are provided for acting on said input file to generate said serialization code.

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27. A data processing system according to claim 26 wherein said two code generators are a binding generator and a DO generator.

28. A data processing system according to claim 15, further comprising:

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iii) means for using said serialization code in an application to carry out type conversion.

29. A computer program product for generating serialization code for representing a model in a plurality of type systems, said computer program product comprising:

a computer usable medium having computer readable program code means embodied in said medium for producing an input file from said model for a given set of objects; and
said computer usable medium having computer readable program code means embodied in said medium for providing a code generator for acting on said input file to generate said serialization code.

30. A computer program product according to claim 29 wherein said model is exported from a UML description as an XMI file and wherein said model comprises a plurality of objects, and wherein said input file is an XML file, further comprising computer readable program code means embodied in said medium for producing said input file from:

- i) binding information between said model and said plurality of type systems;
- ii) graphs that describe relationships between said objects; and
- iii) type conversion information that describes how to convert a non-primitive type to a string.

31. A computer program product according to claim 30 wherein said plurality of type systems comprises Java and SQL.

32. An article comprising:

a computer readable modulated carrier signal;
means embedded in said signal for producing an input file from said model for a given set of objects; and
means embedded in said signal for providing a code generator for acting on said input file to generate serialization code.

33. A computer-implemented method of generating a model description from a description of a model in XMI comprising a plurality of objects which is useful for generating serialization code for representing a model in a plurality of type systems, comprising producing an input file

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- i) binding information between said model and said plurality of type systems;
- ii) graphs that describe relationships between said objects; and
- iii) type conversion information that describes how to convert a non-primitive type to a string.